Graphical Short Term Forecast Product – "GraphiCast"

Product Description Document

Part I – Mission Connection

- a. Product Description The Graphical Short Term Forecast Product (GraphiCast) is a graphical representation of the short term weather forecast (0 to 6 hours) in the forecast area of responsibility of individual NWS Weather Forecast Offices (WFO). It depicts current radar, satellite, or observation imagery with graphical and text annotations showing forecast weather conditions in the next several hours. In rapidly developing situations, it is updated at least hourly.
- b. <u>Purpose</u> The purpose of the GraphiCast is to provide users with a visual aid to assist in the communication and comprehension of complex ongoing and forecast weather situations and to enhance user preparation and response to developing weather conditions; especially hazardous weather conditions.
- c. <u>Audience</u> The primary audience for this product includes the general public, emergency management officials, other key decision-making officials, and the media.
- d. <u>Presentation Format</u> FX-Connect software, developed by NOAA's Forecast Systems Laboratory, running on the Advanced Weather Interactive Processing System (AWIPS) is used to create images which may include the WSR-88D reflectivity data and graphical and textual annotations. The images are then automatically sent (via ftp) to the Regional Web Server where it is made available via the local office's web page.
- e. <u>Feedback Method</u> The presentation Web Page contains a interactive link whereby users can provide comments and suggestions.

Part II – Technical Description

- a. <u>Format and Science Basis</u> The GraphiCast Product is created as an image. The graphic contains pixel based images, typically from the WDR-88D reflectivity data or satellite imagery, which show areas of significant weather. Vector based graphics and textual annotations describe the type of ongoing activity along with forecast movement and development for the next several hours. Meteorologists use their knowledge of remote sensing technology combined with mesoscale and synoptic-scale analyses, model forecasts and personal experience to create the annotated portion of the product.
- b. <u>Product Availability</u> The product is available whenever significant weather impacts are ongoing or expected in the WFO's area of forecast responsibility. The product updates are based on the fluidity of the ongoing weather pattern.
- c. <u>Additional Information</u> The requirement for the short term forecast is found in NWSI 10-517 Section 2.